



AIRGAIN

FirstNet Ready HPUE Antenna Modem

## AirgainConnect AC-HPUE

Multi-Band High Power LTE Antenna Modem

### Overview

The AirgainConnect FirstNet Ready™ AC-HPUE high power user equipment (HPUE) delivers the maximum allowed radiated power directly to the LTE antenna elements. The **uplink signal is the weakest link in the LTE connection**, which can be problematic in fringe coverage areas or inside buildings such as parking structures. When the uplink is disconnected, the user gets no service in the down-link. AirgainConnect's patented technology **eliminates the loss over the coax cables** from the vehicle router to the roofmounted antenna, providing **10 times the transmit power** when compared to the router's conventional modem. The result is **deeper building penetration** and **higher uplink data speeds** at the edge of the network.

AirgainConnect AC-HPUE 6-in-1 is a **rugged outdoor mobile antenna** with **integrated modem**, designed to meet the most demanding LTE connectivity needs of public safety and fleet vehicles. AC-HPUE provides two or three **high gain multi-band LTE** antennas and one **band 14** LTE antenna powered by an **HPUE LTE modem**. AC-HPUE also supports two or three **high gain tri-band Wi-Fi** antennas, including the new 6 GHz ISM band for **Wi-Fi 6E** (802.11ax), and an active **GNSS** element inside a single robust and compact housing.

AC-HPUE attaches to the router WAN port via Ethernet data cable or directly to a laptop via USB cable. Wi-Fi and GNSS antennas connect to the router just like all other Airgain fleet antennas. This means your router can be seamlessly used for Wi-Fi, location-based services, and managed using your existing network management system.

- Unique design increases power at LTE antennas, increasing cellular coverage
- Rugged design for operation in all weather conditions
- IP67 rated rooftop installation
- USA factory ensures fast turnaround for customizations
- Antennas: 3x LTE, 2x Wi-Fi, 1x GNSS
- US Patent 10,511,086 B1

### Applications

Whether you are a first responder (e.g., police, fire, EMS), or in a public safety support role (e.g., bus, rail, courier, utility, waste or water management, security), AC-HPUE provides a quick and easy way to upgrade to band 14 LTE service.

AirgainConnect's patented technology boosts coverage for fleet and enterprise users on a wide variety of cellular bands and can be added alongside your current vehicle antenna, providing a dual modem redundant solution.



Optimal MIMO Performance



Compact and Robust UV Resistant Housing



Full Outdoor Installation Ready



Customizable Cables and Connectors to Connect to Any Modem



Flexible Mounting Options



GNSS



Low loss cable accessories



Fast custom turnaround time



Standard Configuration	
AC-HPUE-C3W2G-Q-S-EI-WH-5M	MIMO LTE x 3, Wi-Fi 6 x 2, & GNSS, Ethernet Injector, Threaded Bolt Mount, SMA on GNSS, RP-SMA on Wi-Fi, White, 5m (16.4ft) coax
AC-HPUE-C3-Q-S-EI-WH-5M	MIMO LTE x 3, Ethernet Injector, Threaded Bolt Mount, White, 5m (16.4ft) coax
AC-HPUE-C3W2G-Q-F-EI-WH-5M	MIMO LTE x 3, Wi-Fi 6 x 2, & GNSS, Ethernet Injector, Threaded Bolt Mount, SMA on GNSS, RP-SMA on Wi-Fi, white, 5m (16.4ft) coax, Ford Interceptor Utility 2020+
AC-HPUE-C3-Q-F-EI-WH-5M	MIMO LTE x 3, Ethernet Injector, Threaded Bolt Mount, White, 5m (16.4ft) coax, Ford Interceptor Utility 2020+

Available in color white, customizable cable lengths up to 35 feet, Wi-Fi and GNSS configurations.

Electrical
Ethernet Injector +12 VDC
Ignition Sense
Sleep Sense (Sleeps when the router sleeps)
Power conditioning built to automotive standard ISO 7637-2

LTE Modem
Cat 12, 3GPP Release 12+
Band 14 output power: 1.25W (Class 1) Element 1
Bands 2, 4, 5, 12, 17, 29, 30, 66 output power: 200mW (Class 3) Elements 2 & 3
MIMO: 2 x 2, 4 x 2
Transmit bandwidth: 1.4 MHz through 20 MHz
WCDMA capabilities on bands 2, 4, 5

WiFi
IEEE 802.11 a/b/g/n/ac/ax Wi-Fi 6, 6E
Frequency Range Elements 4 & 5 2.4/4.9-6.0 GHz

GNSS Data - Ceramic Patch Antenna Specification		GNSS Data - LNA Specification	
Bandwidth	1561 – 1602 MHz	Noise Figure	1.2 dB
Gain@Zenith	2.5 dBi	Gain	28 dBi
Polarization	R.H.C.P.	Voltage	3.3V~5.6V
Axial Ratio	3.0 dB Typ.	Current	9.6±1mA@3.3V

SIM Card		Environmental Data											
3FF Micro SIM card support		Operating Temperature	-30°C to +70°C										
<table border="1"> <thead> <tr> <th colspan="2">Mounting Data</th> </tr> </thead> <tbody> <tr> <td>Dimensions</td> <td>Height: 3.27" (83.1 mm) Width: 5.79" (147.0 mm) Length: 7.95" (201.9 mm)</td> </tr> <tr> <td>Weight</td> <td>1.7 lbs. (771 g)</td> </tr> <tr> <td>Mount</td> <td>Bolt Mount</td> </tr> <tr> <td>Color</td> <td>White (WH)</td> </tr> </tbody> </table>		Mounting Data		Dimensions	Height: 3.27" (83.1 mm) Width: 5.79" (147.0 mm) Length: 7.95" (201.9 mm)	Weight	1.7 lbs. (771 g)	Mount	Bolt Mount	Color	White (WH)	Extended Operating Temperature	+70°C to +80°C
		Mounting Data											
		Dimensions	Height: 3.27" (83.1 mm) Width: 5.79" (147.0 mm) Length: 7.95" (201.9 mm)										
		Weight	1.7 lbs. (771 g)										
		Mount	Bolt Mount										
		Color	White (WH)										
Dust & Waterproof Rooftop Housing	IP67												
Vibration	MIL-STD-810G												
Shock	IEC 60068-2-27-2008												
Temperature & Humidity	IEC 60068-2-30-2008												
Solar Loading	IEC 60068-2-5												

**Contact Information:**